

WHAT IS CLAIMED IS:

1. A small-sized opening and closing device which relatively connects a first member and a second member, which construct a small-sized electronics
5 device, with each other to open and close, comprising:
 - a shaft;
 - a cam member attached to said shaft, having a 180 degrees symmetric cam portion composed of a convex portion and a concave portion on one end phase thereof, and arrested its rotation by one connecting portion of either said
10 first member or said second member;
 - a slider cam attached slidably to said shaft facing to said cam member, having a 180 degrees symmetric cam portion composed of a convex portion and a concave portion on a side thereof facing said cam portion of said cam member, and arrested its rotation by the other connecting portion of either said
15 first member or said second member; and
 - a compression spring wound around said shaft to push said slider cam toward said cam member side; and
 - wherein each cam portion provided on an opposed side of said cam member and said slider cam separate by the position of axial core side or the
20 outside to provide each 180 degrees symmetric cam at a different position, at least a pair of 180 degrees symmetric cams on axial core side and the outside.
2. The small-sized opening and closing device according to claim 1,
25 wherein said slider cam is provided slidably in a cam case with a baffle on the outside, while arresting its rotation.
3. The small-sized opening and closing device according to claim 2,
wherein, in order that said cam member or said cam case is to be fixed on said shaft, an arresting groove in a radial direction on a fixed portion of said shaft is
30 provided to arrest said arresting groove with said cam member or said cam case by using a fixed pin inserted from a radial direction.

4. The small-sized opening and closing device according to claim 2, wherein, in order that said cam member or said cam case is to be fixed to said shaft, an arresting hole in a radial direction on a fixed portion of said shaft is provided to arrest said arresting hole with said cam member or said cam case
5 by using a fixed pin inserted from a radial direction.

5. The small-sized opening and closing device according to claim 2, wherein said cam case is arrested to a flange portion provided on one end portion of said shaft, and said cam member engages with an arresting hole
10 provided on the other end portion by using said fixed pin.

6. The small sized opening and closing device according to claim 2, wherein said cam case is arrested to one end portion of said shaft by using a snap ring.
15

7. The small-sized opening and closing device according to claim 2, wherein said cam case is arrested to a flange portion provided on one end portion of said shaft, and said cam member is arrested to the other end portion of said shaft by using a snap ring.
20